

**TUNABLE NEGATIVE RESISTANCE DEVICE****ABSTRACT**

5           The invention proposes a device for providing tunable high-frequency and/or radio-frequency comprising within one IC-package at least four signal paths providing at least two input and at least two output ports (rf-port1, rf-port2, rf-port3, rf-port4) at least one active component (T) and at least one variable passive component ( $C_1$ ,  $C_2$ ) connected at least with an input  
10 port of the active component (T), and at least one control path for controllable tuning the at least one variable passive component ( $C_1$ ,  $C_2$ ).